Security Solution for your Safe Life
Power
DVR Series

This manual explains how to set up and operate DVR. Please heed all warnings and read about all the special features of this product. Keep this manual for future use.

All settings can be changed without advanced notification and the accuracy and reliability of all information contained herein is warranted. We will not be responsible for any violation of our rights.

Contents

I. System Overview 5
1. Instruction 5
2. Special Features 5
3. Identification of Controls 8
4. Installation 10
II. Login Mode 14
1. Start Up Screen 14
2. Log Out 15
3. Virtual Keyboard 17
III. Live Mode 18
1. Screen of DVR Status 19
2. Screen Division Status 21
3. Selecting Channel and Surveillance Order 22
4. Absence Mode (Away mode) 23
5. Display Configuration 24
(Only with Ultima and Gold Models)**Error! Bookmark not defined.**
6. Pan/Tilt Function 25
(Only with cameras support this function) 25
7. Backup 28
8. Instant Recording 31
9. Other Functions 32
IV. Configuration 33
1. Channel/Sensor 34
2. Motion Detection 36
3. Schedule 38
4. Frame 40
5. Record 41
6. Event Setup 43
7. PTZ Setup 46
8. System 48
9. Register User 50
10. Setup Info 51
11. About 52

V. Search..... 53
1. Search 54
2. Zoom..... 60
3. Save as Image File 62
4. Search Application..... 63
5. Warranty..... 65

I. System Overview

1. Instruction

When a VCR records to a tape, DVR records pictures from a CCTV and saves the compressed data onto a hard disk while combining Multiplexer, Quad, Time Lapse VCR, Sensor, Alarm, and other systems. You do not have to manage or change storage devices like VCR tapes, there are no changes in picture quality, and you can also search faster than tape. We also added a Sending function that could not be possible with analog devices so it is possible to watch images through a Modem or network. It is a digital system that can be operated from long-distances at a low price.

2. Special Features

(1) Live

① Display of 16 channels (Ultima Series)
② Various divided display: 1, 4, 9, S6, S8, 16
③ Auto-convert and Full-screen mode
④ Zoom-in and -out
⑤ Detecting and indicating motion in Away Mode
⑥ Display configuration: Brightness, Contrast, Density, Color
- Pan/Tilt Function
- Supports more than 72 products

⑦ Supports preset mode (99 positions)
⑧ All the records can be seen in one window
⑨ Self-diagnostic and restart function

(2) Set up

① Input and output of 16-channel sensor

② Motion Detection: Area, Calibration, Preview
③ Various Recording Modes: Continuous, Motion Detection, Sensor
④ Record Rate (320×240, record/display)
- 30/30 fps of DVR
- 60/60 fps of DVR
- 120/480 fps of DVR
- 120/240 fps of DVR
- 120/120 fps of DVR
- 240/480 fps of DVR
- 240/240 fps of DVR
- 480/480 fps of DVR

⑤ Recording
- Max 16 channels of video
- Resolution: 320×240, 640×480
- Quality of picture: Average, Good, Better, Best
- Codec: MPEG4, MJPEG
- Supports 2~8 channels of Audio

⑥ Pre/Post Alarm Recording
- Pre Alarm takes 5~30sec
- Post Alarm takes 5~30sec

⑦ Event Alarm Function: Sending E-mail and waiting for connection.
⑧ Full screen mode
⑨ Saving and reading Setup

(3) Search

① Simultaneous search of 16 channels
② Searching in Recording Mode: Continuous, Motion detection, Sensor
③ Various divided screens: 1, 4, 8 and 16
④ Display Speed : ± 10X
⑤ Power Search that helps find movement fast
⑥ Panorama Search which helps see the camera's image in order in full-screen
⑦ Editing Image

⑧ Prevent paused image and videos from alteration
⑨ Capturing and Printing image

(4) Backup

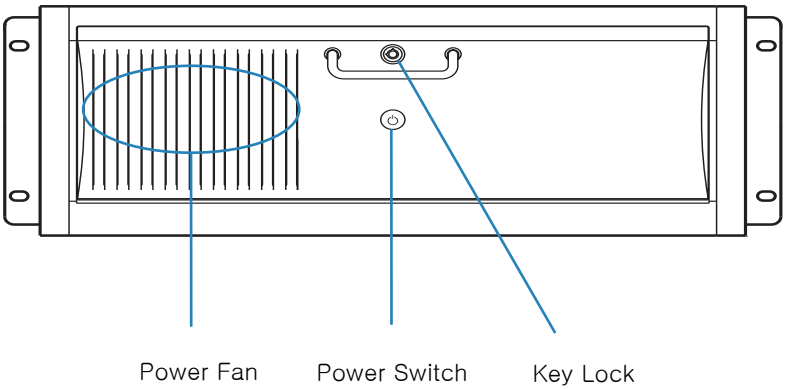
① Various backup system: Removable HDD, CD-RW'.
② Auto and Manual backup

(5) Transmission

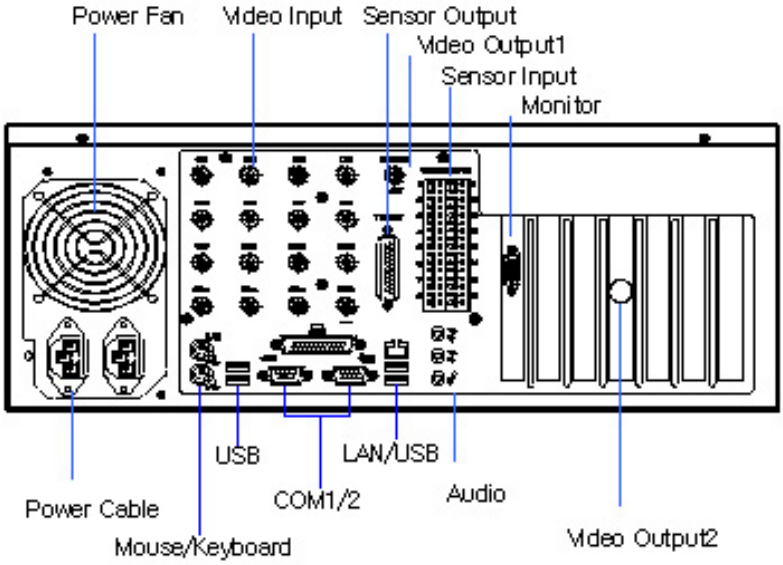
① Method: LAN, ISDN, ADSL and PSTN.
② Protocol: TCP/IP Sending video files (max 200 fps)
③ Substitution: 1.6 Mps per 100 fps
④ N:N Sending
⑤ Independent operation of 32 channels
⑥ Surveillance, Search, File Download, Local Search
⑦ Zoom-in and Zoom-out of Live/Search Screen
⑧ Remote Configuration and PTZ Configuration
⑨ Key Lock to prevent copying
⑩ Convenient function using Wheel Mouse

3. Identification of Controls

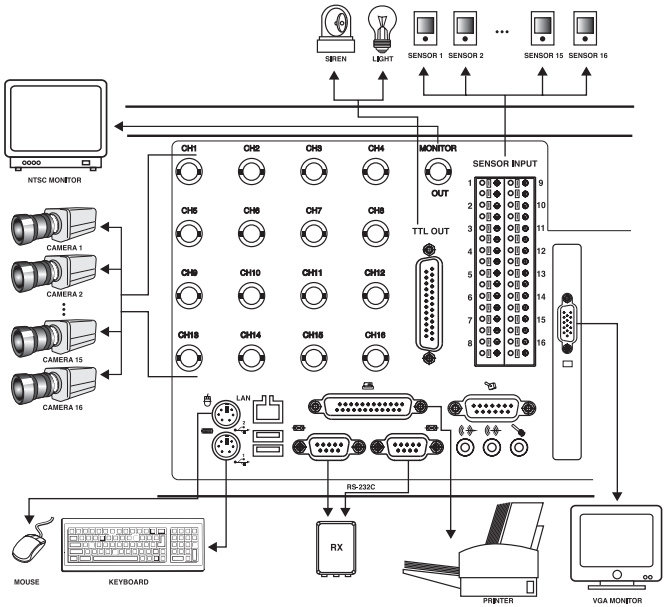
(1) Front of DVR



(2) Rear of DVR


Power Fan
Video Input
Sensor Output
Video Output1
Sensor Input
Monitor
USB
LAN/USB
Power Cable
COM1/2
Audio
Mouse/Keyboard
Video Output2

4. Installation



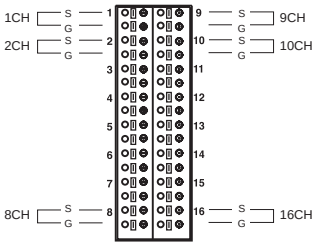
(1) Power On

① Connect all cables at rear of DVR
- Connect Power Cable
- Connect Mouse and Keyboard

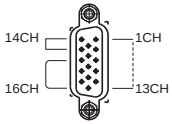
② Turn on DVR
- Press Power Switch
- When DVR is started, Auto Scan DVR Program will start automatically.
- Verify if you can see start up screen
- Check if the power fan is working
- Check if power LED is on

(2) Connecting and Testing Sensor

Sensor Input



Sensor Output



① Sensor Input
- Sensor Input supports methods of contact and TTL
- It connects Signal and GND Terminal of Input of each channel
- It sets up input sensor checking if output is N/C or N/O

② Sensor Output
- Sensor Output uses TTL method that has a GND terminal thus, there is a 5V voltage gap in operating an alarm so you need an extra Relay board..
- When Sensor Output is N/O and it is Normal, 5V of voltage comes in between Signal and GND thus drops voltage gap to OV.

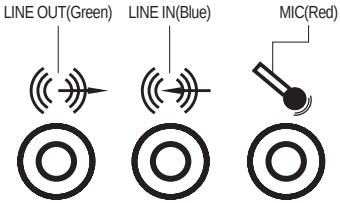
③ Precautions
- If alarm is active even though sensor did not detect, check connection of Signal and GND. Check if the sensor type was set correctly under Channel/Sensor configuration.
- Do not let high voltage and current flow on the Signal of Input Terminal.
- Do not let high voltage and current flow on the Output Terminal

(3) Setup of Sound Recording and Precautions

① Set up Procedure

- Setting up the Sound Card: With one Sound Card, it is possible to record 2 channels of sound. With additional Sound Cards, it is possible to record a maximum of 6 channels of sound. A sound Card is built into the main board so it basically supports 2 channels.
- When installing a new Sound Card, the appropriate driver files need to be installed.
- After opening the c:\dvr\ini\config.ini file, change to 'Audio' value under [Setup] to 'Audio=1'.
- After starting the DVR program, check Audio Recording under Quality of picture/audio.

② Connecting Cables



- Amp Output and Sound Output can be connected to the LINE IN terminal. The LINE IN Terminal has Left and Right channels so 2 Channel Recording is possible.
- Connect Mic to MIC IN Terminal. Only 1 channel recording is possible.
- Connect speakers to LINE OUT (Speaker) Terminal.

③ Precautions

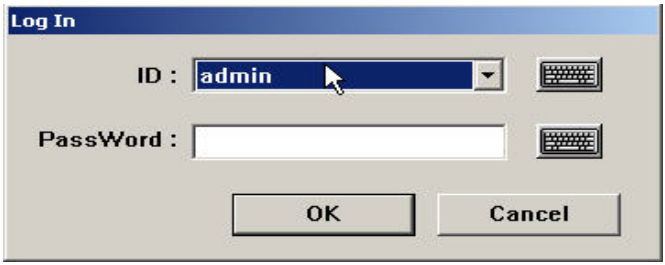
- When recording 6 channels, there can be a collision if sound cards with same chipset are used so you need to install sound cards with different chipsets.
- Check if Recording Order is checked under the Schedule/Recording Rate tab when you cannot search even though you have set Sound Recording.

II. Login Mode

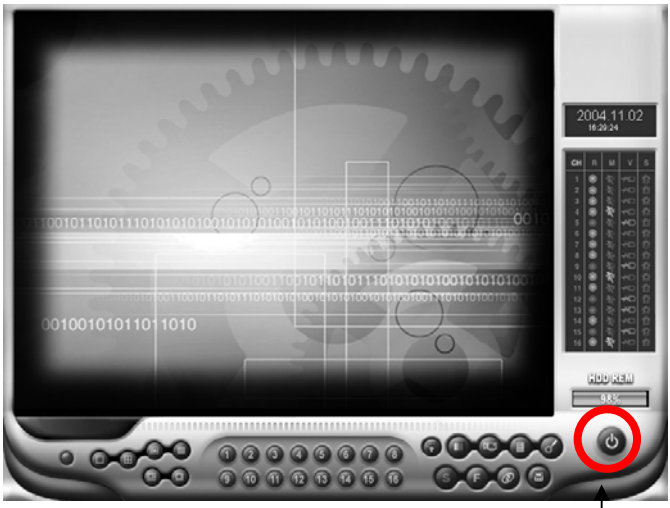
1. Start Up Screen

DVR has user level access control. Just click the Login Icon to open your login in window.

The factory default password is “333”.

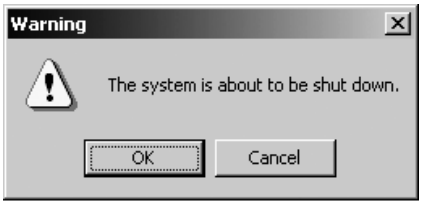


2. Log Out



Select one of the four check boxes.

When you click Log Out, you can see the Start up Screen.

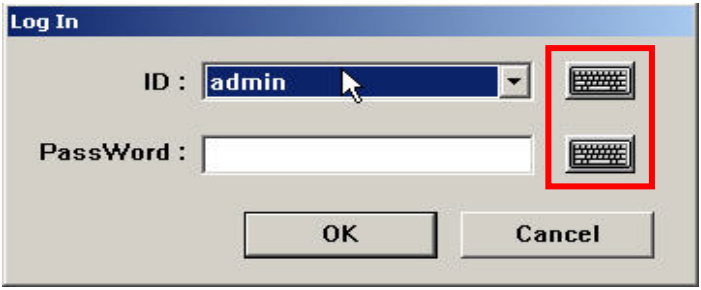


You will see the following message. Press the 'OK' button to shut down the system..

This message will pop up when shutting down program.

3. Virtual Keyboard

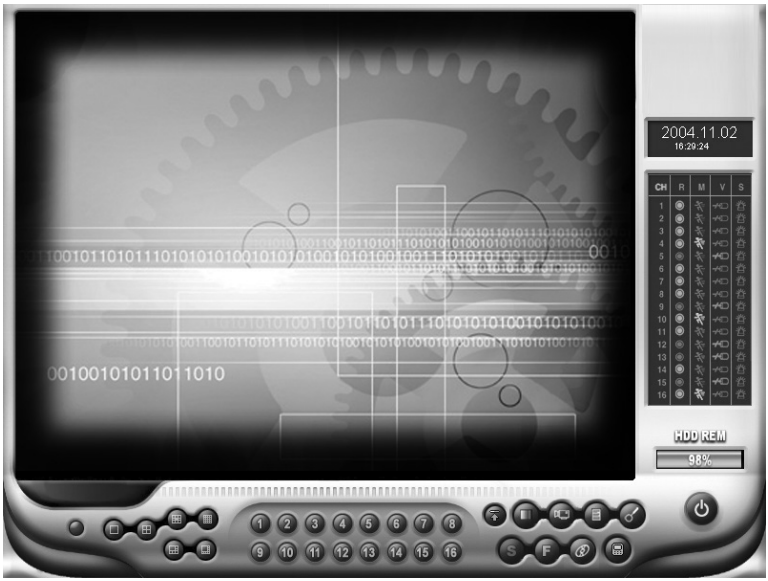
Clicking on the keyboard icon next to the password field will open the Virtual Keyboard.



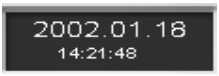
Enter your password with your mouse and click the OK button. The text will be entered into the password box. Click OK to enter live view.

III. Live Mode

This is the main screen of DVR and you can view any channel of surveillance and the status of the DVR. You can also configure the Pan/Tilt, configuration, Search, Backup, Display settings, etc.



1. Screen of DVR Status



This shows the current date and recording time.

This shows the Recording status of each channel, Motion, Camera, and Sensor Detecting.

This indicates the recording state and when recording the relevant channel is shown in orange.

This indicates motion and when detected the relevant channel is shown in sky blue.

This indicates the status of Video input and when there is no image or when the wire is cut the relevant channel is shown in red.

This indicates the status of Sensor detection and when detected the relevant channel is shown in purple. The status of these must be configured correctly for the given environment.

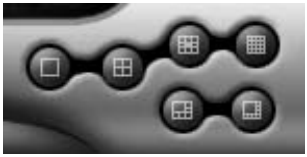
This indicates the current status of instant recording and is shown in a blinking red for the relevant channel.

This shows graphically the current usable space on your HDD.

This shows numerically the total space and usable space on your HDD.

This shows the date of the oldest recorded file.
(A single mode can be selected among 3 modes)

2. Screen Division Status



There are several preconfigured division screens that can be selected from (1, 4, 9, S6, S8, 16)

① Displays a single selected screen.
② Displays 4 divided screens.
③ Displays 9 divided screens.
④ Displays 16 divided screens.
⑤ Displays 1 channel in large view and the next 5 channels in smaller view.
⑥ Displays 1 channel in large view and the next 7 channels in smaller view.

(Clicking the same button again lets you view the next set of channels for that mode.)

3. Selecting Channel and Surveillance Order

If you click a channel number, you can see the selected image in full screen. Clicking the channel image does the same function and clicking again returns to the original screen.

Screen Switching Button: In 1, 4, 9, S6, S8 divided screen mode, clicking this button switches to next channel in configurable time interval.

Full-Screen Button: Clicking this button shows the current image in Full-screen. Right-Clicking returns to the previous mode.

※ Zoom-in

Put the cursor on the screen you want to zoom-in and right-click to zoom-in. You can zoom-in up to 200% by clicking 8 times.

4. Absence Mode (Away mode)

When you click this button, a red star will appear at the left corner of the screen when motion is detected. With this red star, you can see where motion was captured while you were away. Clicking this button again toggles off the away mode and the red star will disappear.

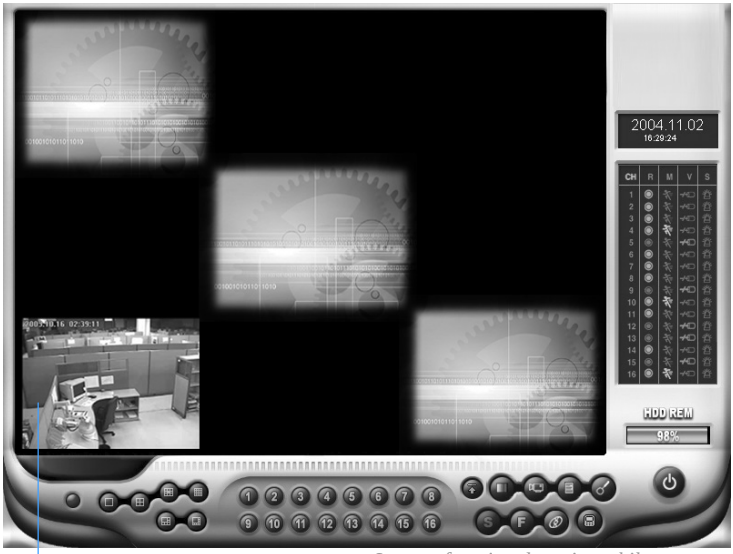


Image of motion detection while away.

5. Display Configuration

This button is for the configuration of the camera display. Clicking this button will show a pops up control panel like the picture below.

You can configure the display of each channel. When the above window pops up, select a channel from the combo box and use the scroll bar to change the Brightness, Contrast, Saturation, and Hue. You can view the configured screen live and this configuration does not affect recording. (The default value for all settings is 5.)

6. Pan/Tilt Function

(Only with cameras support this function)

This is a function to control the Pan/Tilt of supported cameras. Clicking this button pops up the control panel of Pan/Tilt on the Live display.

You can move the position of the camera up/down and left/right.

If you set two positions P1 and P2, and press the AUTO button, the camera will move back and forth from P1 to P2.

P1 Button - This sets the beginning point of the camera.

P2 Button – This sets the ending point of the camera.

This zooms in and out of the image.

This changes the focus of the image. (Most cameras support Auto Focus)

This changes the iris of the image.

Power Button turns the camera on/off.

Light Button turns the light on/off.
(Only for cameras with this special feature)

Spare Power Button turns power on/off for other external equipment.

Preset Button - Pressing the middle of the Pan/Tilt window will pop up another Preset Window. The preset function will change the axis of the camera to where the user previously set it to.

This deletes one saved point.

This deletes all saved points.

After inputting the number of a saved point, pressing this button will apply the preset.

This button lets you save the current location in the next successive order.

This saves the location of the camera.

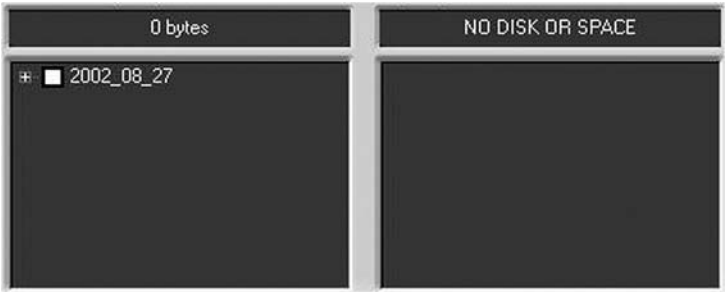
You can save 99 locations per channel. First move your camera to a location you want and click this button to save.

7. Backup

This function is for storing important recorded files in other storage devices. You can use CD-RW and you can also use an extra HDD or Network Drive. After clicking the Backup Button and inputting the password, the backup window will open.

Select a drive that you are going to backup.

The left window shows saved file in the DVR and the right window shows files in backup drive and space available.

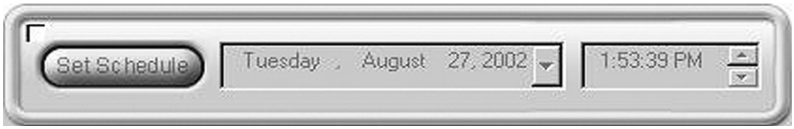


Selecting a backup file on the left window will show the size of the file. Select files that are no bigger than the space available on the backup drive.

Clicking the Start Button will save selected files to the backup drive.

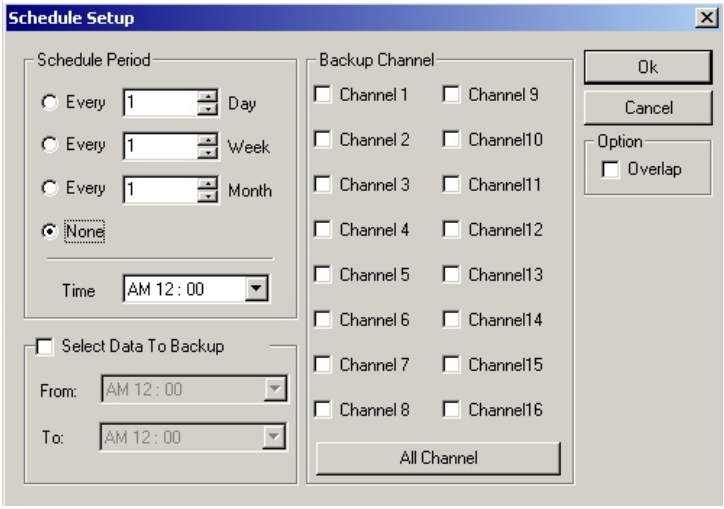
Clicking the Stop Button will stop backup.

This will close the backup program. Pressing this button will not stop back up.



This will backup the selected file at the preset time. If you want Schedule Backup, first check the check-box and set the date and time. Clicking the Set Schedule Button will run backup at the appointed time. Schedule Backup will save all data selected.

Schedule Backup can be configured to backup everyday, every week, and every month. If you input the password, the schedule setup window will pop up.



① Schedule Period : You can set the backup period as of everyday, every week, every month and None including the time you would like to begin the backup.

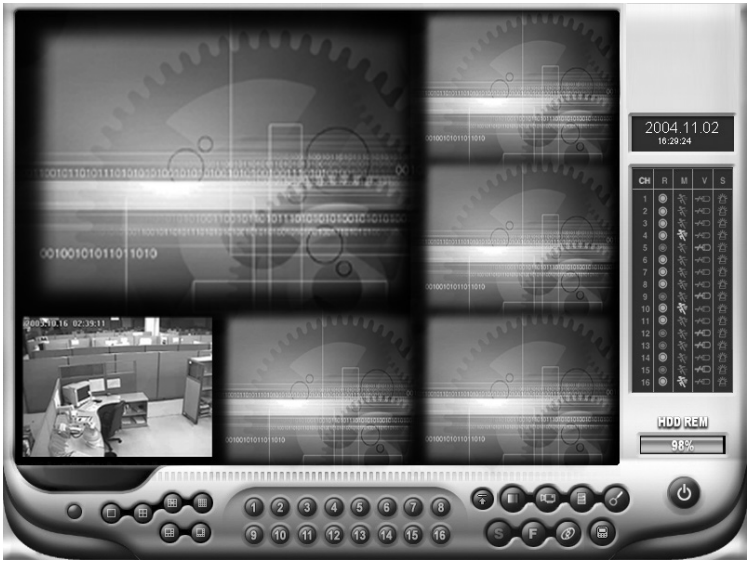
② Select Data To Backup : When you check this feature, you can back up from a certain time period.

③ Backup Channel : You can choose which channels you want to back-up or all channels.

④ Overlap : When checked, the data for backup will be saved from the starting position. When unchecked, the data for backup will be saved from the last finished position.

8. Instant Recording

Clicking on the Instant recording button will start the currently selected camera recording at an increased frame rate within the remaining capacity without affecting the frame rate of other channels.



A red marker will appear next to this channel.

9. Other Functions

This button is for setting up the DVR.

This button is for searching images saved in the DVR.

This button is for operating with a POS system (Optional). Detailed instructions will be followed on the next page.

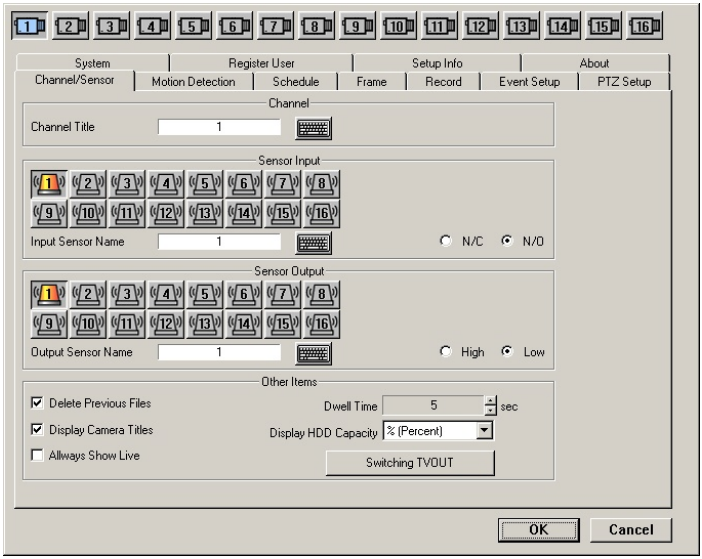
IV. Configuration

This button is for configuring the DVR.
If you click this button, a window, as shown below, will pop up and prompt you for your password.

Enter your password and click 'Enter' to continue. Only the authorizer can set the initialized password.
If you enter the correct password, the configuration will pop up, and if you enter the wrong password, nothing will happen.

DVR configuration has 11 tabs. This can be changed according to the status of upgrades. Most tabs are for one channel.

1. Channel/Sensor



Initialization or Setting up channel/sensor Screen

This setup screen consists of 10 basic categories.

① **Channel :**
Up to 10 letters (20 characters) in English for the Channel Title

② **Sensor Input :**
Out of 16 sensor tabs, if selected sensor detects motion, it operates as it is set. You can enter a name or location of Sensor, under Input Sensor Name. You can select the type of Input Sensor, either N/C (Normal close) or N/O (Normal Open).
Ex) Infrared ray Sensor, Porch, Parking Lot…
(You can set up what type of sensor in Input Sensor)

③ **Sensor Output :**
Out of 16 sensor tabs, if input sensor or motion detection is activated, a signal is sent to the selected Sensor Output to activate the sensor. You can enter the name or the location of a sensor under Output Sensor Name. You can select the type of Sensor Output, either High or Low.

④ **Delete Previous Files :**
When this function is selected, it will delete previous files if there is no more space on your HDD. It deletes the oldest file first.

⑤ **Display Camera Titles :**
If you do not check this, it will not show sub-titles on the Live Screen.

⑥ **Dwell Time :**
This sets up the switching time in second between channels when activated.

⑦ **Method of Displaying HDD Capacity :**
When indicating space on the Live Screen, you can select the form of indication.

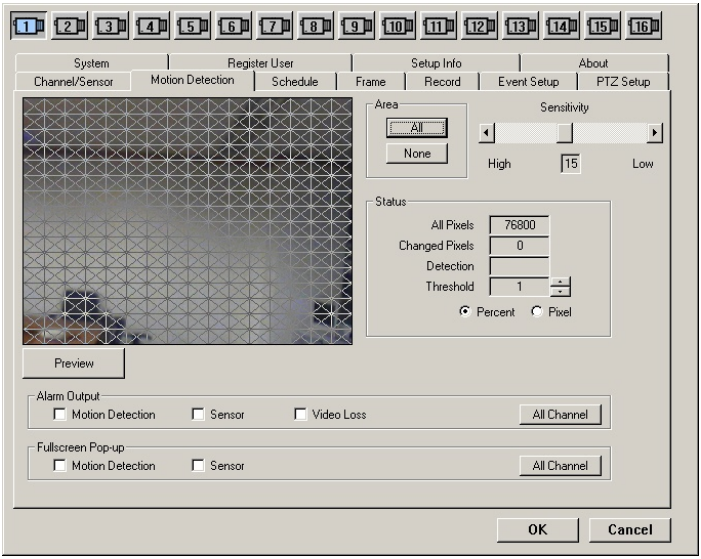
⑧ **Switching TV OUT :**
This changes the output signal into TV Output.

※ Caution :

If Delete Previous Files is not selected, you cannot save new recorded data when your HDD is full.

2. Motion Detection

When setting up Motion Detection Recording, you can set up the area and sensitivity of detection.



Motion Detection Screen

① **Setting up the Area of Detection**

- All : Detects the whole area. In all area mode, resolution is set to 76,800 pixels (Total number of pixel in NTSC) on screen
- None : Disables whole detecting area
- User Configuration : After checking None button, you can select the area of detection by clicking and dragging.

② **Status**

- All Pixels : This shows the pixel size of selected area.
- Changed Pixels : This shows the number of changed pixels of the selected area.

- Detection : If motion is captured within the configured area of detection, exclamation marks(!!!) will appear.
- Threshold : If the amount of motion satisfies the configuration in the selected area, it will be detected. It can be configured by percentage and number of pixel.

③ **Detection Sensitivity**

-This configures the sensitivity level of detection.

-As sensitivity increases, the detection level becomes more acute; as sensitivity decreases, the detection level becomes duller

.(According to the sensitivity level of detection, Motion detection sets up sensitivity)

④ **Preview**

- It is possible to simulate setup. After clicking this button, you can see the sensitivity with exclamation marks (!!!).

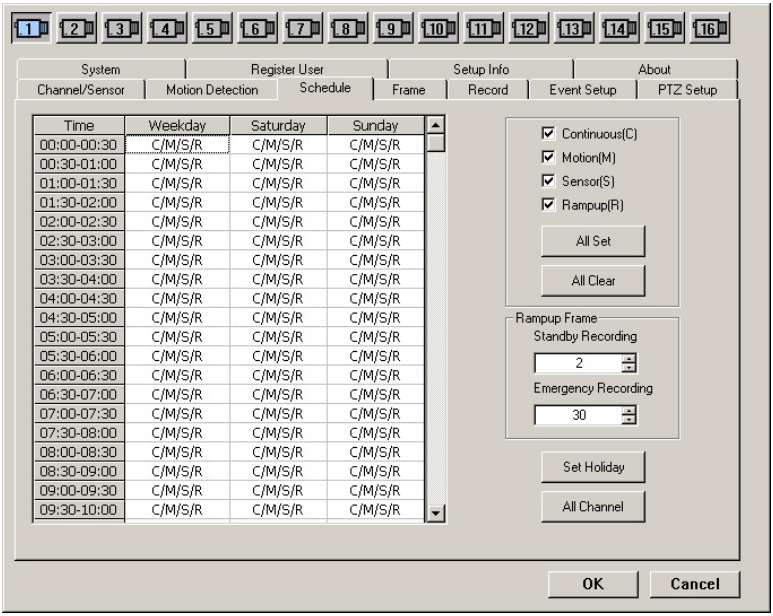
⑤ **Alarm Output**

- Selecting full-screen mode will allow you to hear sound from the Line Out terminal when an event occurs. You can select the event types (Motion Detection, Sensor) as you want.

⑥ **Full screen Pop-up**

- Selecting alarm mode will allow you to view a specific channel in one screen when an event occur. You can select the event types (Motion Detection, Sensor, Video Loss) as you wish.

3. Schedule



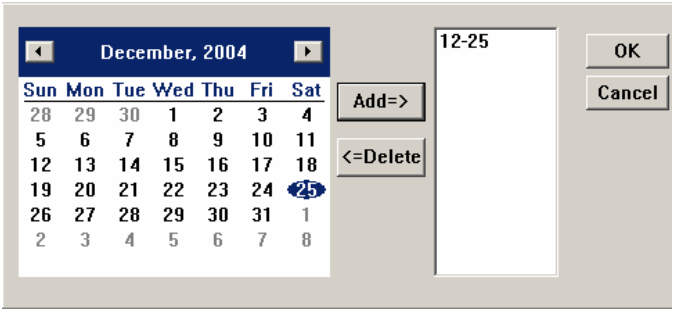
Schedule Screen

① **Schedule** by Weekday, Saturday and Sunday in 30 min blocks.

② **Recording Mode :** Continuous, Motion, Sensor and Ramp-up modes(All set & All clear for easy usage)

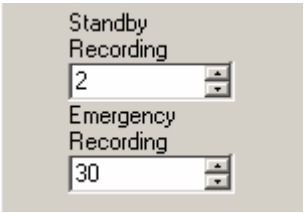
③ Apply settings to multiple cells at the same time by highlighting cells with your mouse then selecting record modes.

④ **Set Holiday**



Set Holiday by calendar, Holiday record settings execute your preconfigured Sunday Schedule.

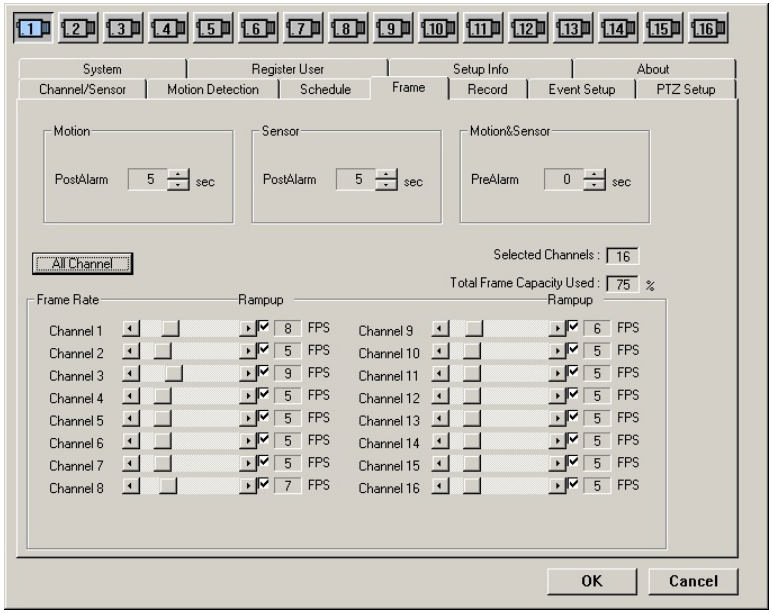
⑤ **Ramp-Up**



- To use Ramp-up, you must have Continuous record schedules as well as Motion, Sensor or both.
- Your Standby & Emergency recording settings take effect and the frame rate you have set for that channel on the Frame tab is ignored.

- Standby and Emergency Recording are set independently for each channel.
- Set Standby Recording for the non-event frame rate when Ramp-up is scheduled. This is the frame rate that will be used under Continuous Record settings.
- Set your Emergency Recording speed to what you wish your event (motion or sensor) record speed should try to achieve. This feature will increase your frame rate based on the systems un-used frame rate.
- Keep in mind if you have a 120 fps unit and have your system set up to use 110 fps you only have 10 fps to use for Ramp-up.

4. Frame



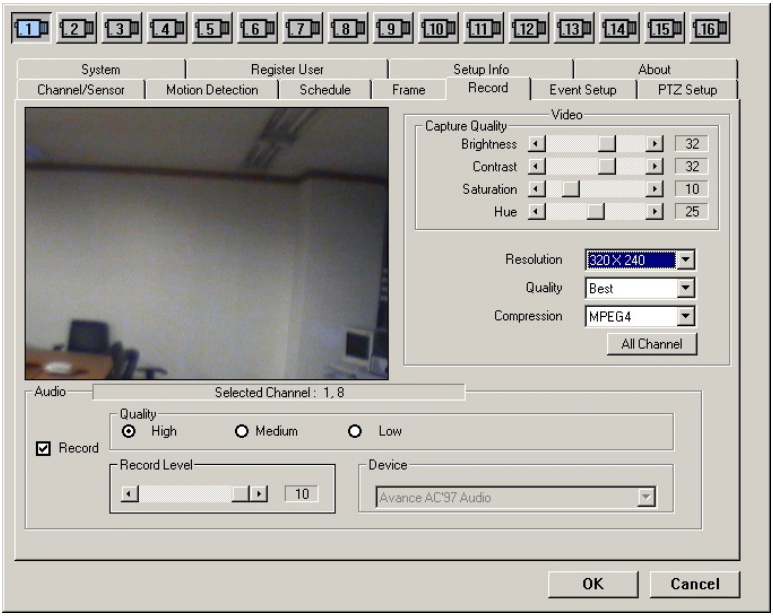
Frame Screen

① **Pre-Alarm & Post-Alarm :**
You can set Pre-alarm & Post-alarm in Motion, Sensor or both of them..

② **Setup Status of Frame rate** :
You can see selected channel, total frame capacity and frame rates for each channel. Also you can adjust the frame rate in each channel by using scroll buttons.

③ **Ramp-Up :**
Preset Ramp-up frame rate will be shown next to frame rate display.

5. Record



Record Screen

① Capture Quality

- The user can configure picture quality, recording resolution and compression method. All configurations can be set according to cameras connected to the DVR.
  (Basic setup is Brightness-31, Contrast-30, Saturation-25, Hue-25, Resolution-320by240, Quality of picture-Better and Compress Format-MPEG4.)
- Clicking the "All Channels" button will apply Resolution, Quality of picture, and Compress Format settings to all channels.

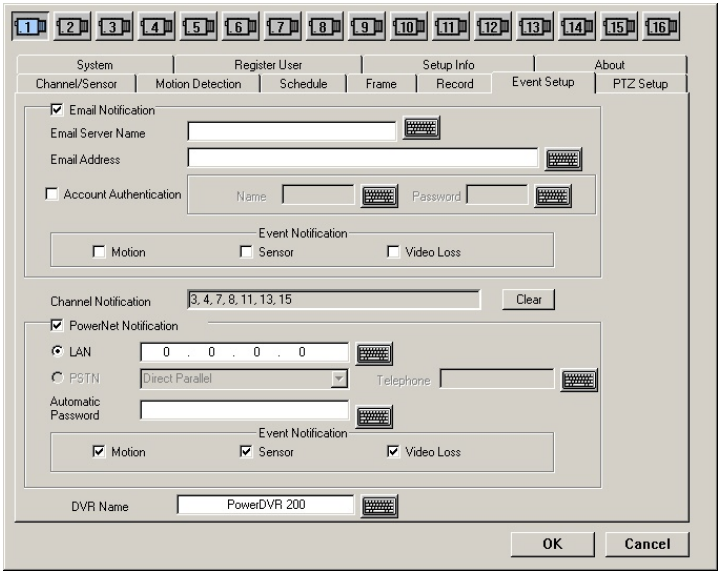
② **Audio** **(optional)**

-You can record sound through the Line-In terminal on the sound card. Click Record button to record sound on the channel you want to record sound.

③ You can see the selected channel right under the preview screen.

④ You can set Quality and volume of sound with the audio device.

6. Event Setup



Event Setup Screen

① Email Notification

When an Event (Motion Detection, Sensor, Video Loss) occurs, it sends type of event, occurred time, occurred channel and name of occurred server via mail.

- **Email Server Name :**
  Supply the name of your SMTP Server. If you do not have a domain name server, you can enter an IP address of a mail server.

- **Email Address :**
  Enter an e-mail address where you want to receive mail. If more than one person wants to get mail, separate the e-mail address with semicolons. ex) A@Z; B@Z; C@Z.....

- **Account Authentication :**
  When the SMTP server requires security, check the Security Configuration category. Enter account and password of the SMTP server. Ask Mail server authorizer for more information.

- **Event Notification :**
  You can choose a specific event that needs to be reported when an event occurs. Unselected events will not send any e-mail when an event occurs.

- **Channel that needs to be sent :**
  You can choose a channel that needs to be reported. Unselected channels will not send any e-mail when an event occurs. You can choose the channel that needs to be reported by clicking on the channel button at the top of the window and pressing the Clear button will delete all selected channels. The channel that needs to be reported is also used in the Client Connecting Function.

② PowerNet Notification

This is a function that connects to a client PC when an Event (Motion Detecting, Sensor, Video Loss) occurs on the DVR. The user can check the channel where the event occurs, the type of event, cause, etc. with the PowerNet program that connects automatically to the Client area. Before using this, you need to set the PowerNet program to 'Waiting for Event' mode. For more information on setting up the PowerNet program, read the manual on PowerNet.

- **LAN :**
  You set this when using LAN(IP Address) Network

- **PSTN :**
  You set this when using PSTN(Telephone Line and/or ISDN) Network.

- **Telephone Number :**
  You write down the Phone number of the Client PC when using PSTN Network.

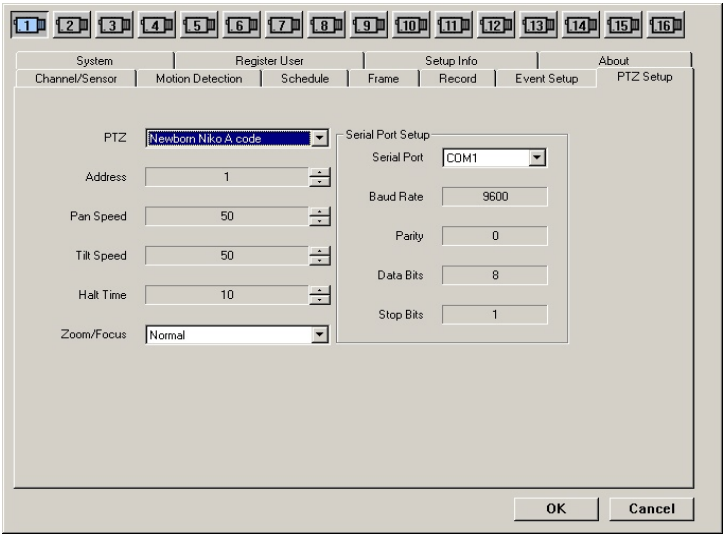
- **Auto-Connecting Number :**
  You use this to tell security to automatically connect the server(DVR) to the Client PC.

- When not using this, you have to enter the password manually. Password of 3 levels can be used.
  (Authorizer password, Grade 1 password, Grade 2 password)

- Event that needs to be reported : You can choose the event that needs to be used for connecting to the Client PC.

- If an unselected Event occurs, it will not connect to the Client PC.
- The channel that needs to be sent : Same as Mail Setup

7. PTZ Setup



PTZ Setup Screen

① Pan/Tilt allows you to configure the camera model, RX Number, Playing, Speed and Control port.

② Set original value of PTZ Driver

③ Basic setup values can be different according to model, so check the model and then select.

④ **PTZ :** Select model of PTZ driver

⑤ **Address :** Set RX(Receiver) and Address using the up/down buttons. This is the control number of the RX device so only identical devices can control it.

⑥ **Pan Speed :** Sets the rate of left/right movement.

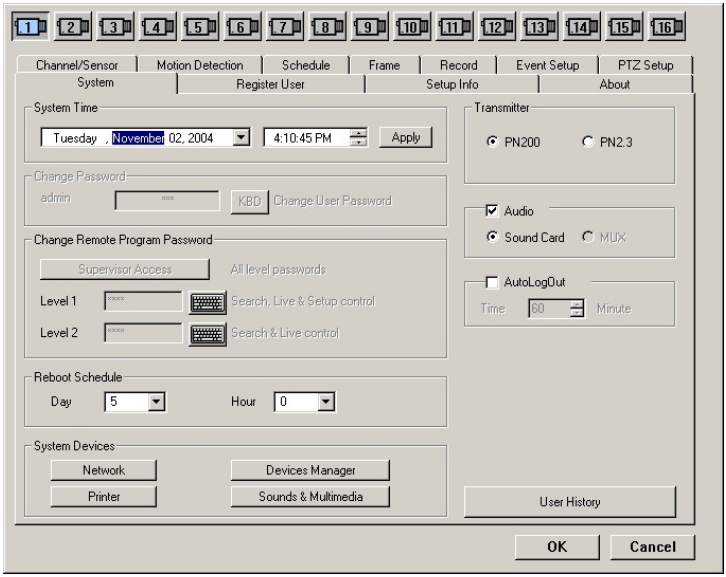
⑦ **Tilt Speed :** Sets the rate of up/down movement.

⑧ **Halt Time :** Sets up how long it is going to stop at a certain location during Auto Panning.

⑨ **Zoom/Focus :** Sets the rate of Zoom and Focus.

⑩ **Serial Port Setup :** In DVR, the RS232 to RS485 signal converter port is appointed.

8. System



System Screen

① **Setup for Transmitter**

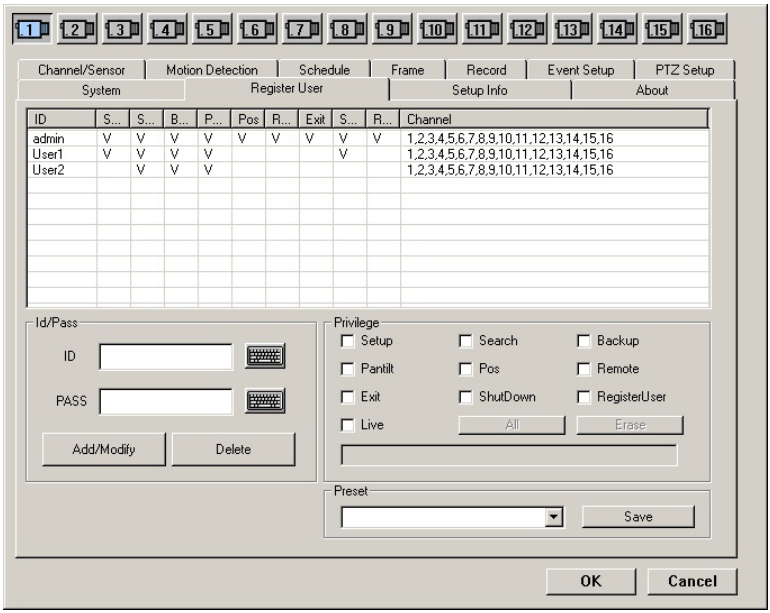
- Audio enable and setup
- Easy access to Network, Printer, System properties and Sound & Multimedia settings without exiting the software.
- Display : user history will display a log of users and their recent activities.

② You can change the time and password & auto rebooting time of the DVR system. When changing the System Time, you need to press the Apply button. Password level 1 allows search and configuration when level 2 only allows search. Password for Authorizer allows Search, Configuration, Backup and Shutdown.

③ **Transmitter :** You can set up the version of the transmitter.

④ **System Device :** You can check information on connected system devices.

9. Register User



Register User Screen

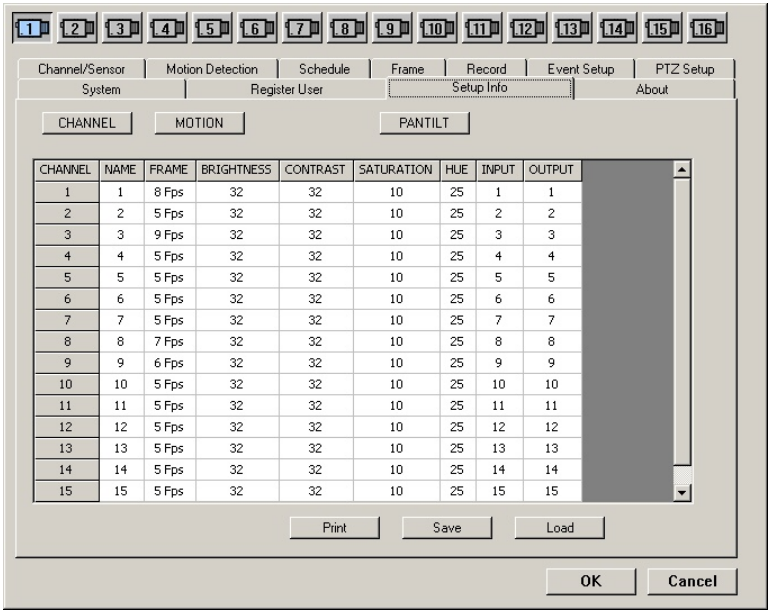
① **User list :** You can see registered users with their privileges (Setup, Search, Backup, Channel)

② **ID/Pass :** You can add, modify and delete ID & Password of user

③ **Privilege :** You can select privileges by clicking check boxes.

④ **Preset :** You can make Preset user data and save it.

10. Setup Info



CHANNEL	NAME	FRAME	BRIGHTNESS	CONTRAST	SATURATION	HUE	INPUT	OUTPUT
1	1	8 Fps	32	32	10	25	1	1
2	2	5 Fps	32	32	10	25	2	2
3	3	9 Fps	32	32	10	25	3	3
4	4	5 Fps	32	32	10	25	4	4
5	5	5 Fps	32	32	10	25	5	5
6	6	5 Fps	32	32	10	25	6	6
7	7	5 Fps	32	32	10	25	7	7
8	8	7 Fps	32	32	10	25	8	8
9	9	6 Fps	32	32	10	25	9	9
10	10	5 Fps	32	32	10	25	10	10
11	11	5 Fps	32	32	10	25	11	11
12	12	5 Fps	32	32	10	25	12	12
13	13	5 Fps	32	32	10	25	13	13
14	14	5 Fps	32	32	10	25	14	14
15	15	5 Fps	32	32	10	25	15	15

Setup Info Screen

① **Channel :** Shows configuration for Channel Name, Recording Frame, Recording Quality and Sensor Input/Output.

② **Motion :** Shows configuration for Motion Detection.

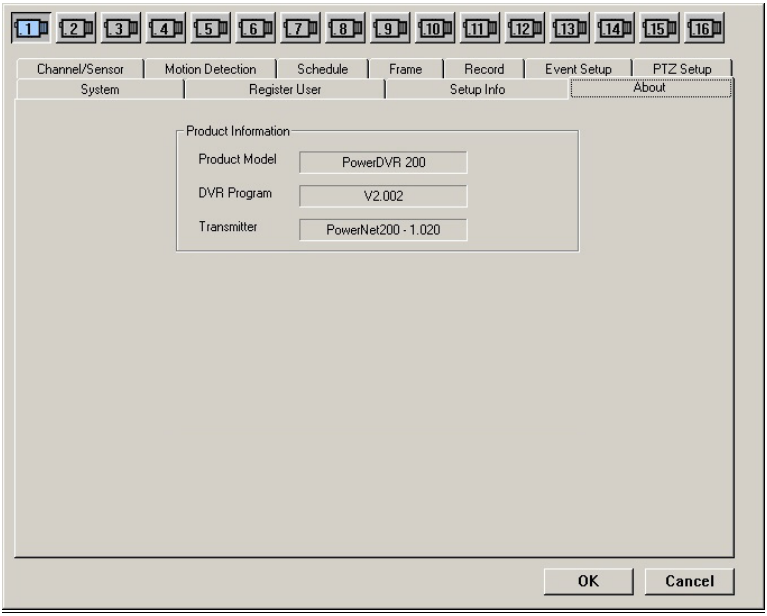
③ **Pan/Tilt :** Shows configuration for PTZ

④ **Print :** Prints contents mentioned above

⑤ **Save :** Can save configuration as a file (Default file name : Backup)

⑥ **Load :** Opens a saved file

11. About



About Screen

① **Product information :** Shows Model Name, Program Version and Trans Version.

② **Manufacturer Information :** Shows address and Phone number of manufacturer.

V. Search

In Search, you can view recorded data files in 1, 4, 8, 16 divided screen mode and it is possible to zoom in, play fast, edit images, print and save images.

If you click a level Search button, like Configuration, enter your password using your mouse and you will see the screen show below. To search, you need over a level 2 password. this includes level 1). After entering your password, click the OK button.

Use the Search Program to search recorded files efficiently by entering the appropriate search variables (date, time, channel and recording mode). With the easy interface, you can search the recorded files precisely and can play back recorded files easily and fast.

16 Channel playback screen

1. Search

① Select the channel you need to search.

② Select Recording mode
(Continuous, Motion Detection, Sensor, POS)

③ Select the date you want (It will search for matching results.)

④ From the results, select files of the time you wish to view and it will play 16 channels at the same time.

You can divide the screen into 1, 4, 8 and 16.

The control panel of the player has 5 buttons, Play, Previous screen, Next screen, Pause and Stop.

There is a speed slide bar to control the playing rate. Moving the bar to (-x10) rewinds the video.

When video is played, the Play button is activated and if you press the Play button, the Stop and Pause button will be activated. Pressing Pause button while playing will activate Power search, Speed bar, Zoom-in, Save and the Print button.

You can see the screen that is displayed like a panorama in full-screen.

Panorama screen

※Caution :

Under resolution 640x480, this function doesn't apply.

While searching, right-click the image and when the curser changes into a magnifying glass, place your mouse on the screen where you wish to zoom-in by controlling the wheel on your mouse.

Screen shot of Playing and Zooming-in on a Channel

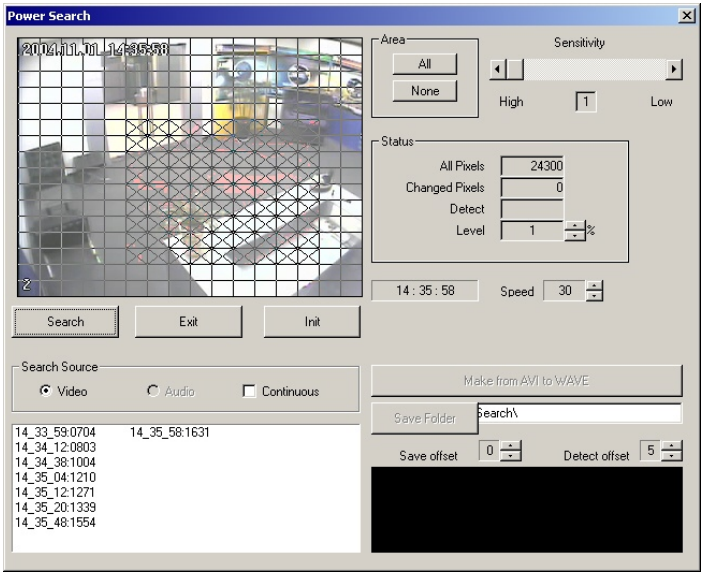
If you click on the Power Search button, you will see a window like the one shown below. The Power Search Function is a cool function that helps users search a certain area and also control the speed.

① **Continuous :** If you check this function, the detected still image will be shown in each stop.

② **Detected File List :** You can save the detected still image on the DVR through “Save Folder”.

③ **Audio :** If you check this, you can save audio together with video. (Save offset & Detect offset can be set as user's customization)

④ **Area, Sensitivity, Status :** Same features with Motion detection in Live mode. If you pause your image while playing, the zoom-in button will be activated.



Zooming-in and adjusting image

This saves the still image in BMP or JPG format. The size of the image is saved as it is displayed.

This prints out the still image.

Print size can be set by user, such as Full size, 1X, 0.5X.

2. Zoom

If you click & drag a certain area with your mouse, you can zoom into the area that made a square of. If the area is too small to see, you can use your mouse wheel to zoom in. In addition, on the screen that was zoomed into, you can use the buttons shown below to get an improved image.

Image adjustment screen

This button is used when there is not much noise on the screen.

This button is used when there is too much noise on the screen.

This button is used when you wish to get rid of the noise without degrading the quality of the picture. If activated, it gets

rid of the noise and improves the quality of the picture.

This button is used when the screen is too bright or too dark. It automatically controls Brightness and Contrast to improve the quality of the picture.

This button is used when the outline is dim. It gives a clear outline to give you a better image.

This button is used when the screen is too sharp. It gives you a smoother picture.

This button is used when you want to go back to the first screen.

This button is used when you want to go back to a previous screen.

This button is used when you wish to see the image in black and white.

This button is used when you wish to save the improved image in a FDD or HDD. The size of the image is saved in 640X480 resolution unlike the Search Image

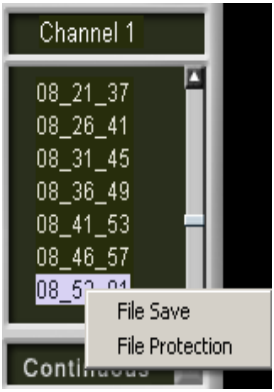
This button is used when you want to print out the screen.

3. Save as Image File

Like Printing, you can save your image as an image file from the Search Screen. The window shown below appears when you press the Save as Image button.

Select the directory, name of file, and format then press the Save button.

4.Search Application



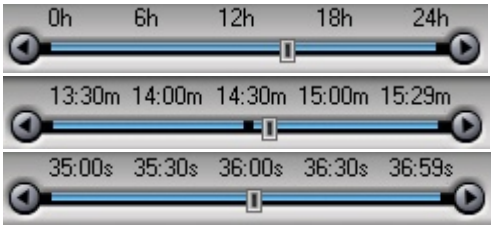
① File Save : Right click on the file you would like to save. Select File Save. In the new window select the location you would like to save it to. The file will be saved as an .avi. file.

② File Protection : Right click on the file you would like to protect from being overwritten then select File Protection. This file name will now appear red in you File list and will not be overwritten until protection is removed.

③ User Define Record : Left click the video file stream to indicate the starting point. Right click the video file stream to indicate the ending point.

④ After you have defined the clip you want, click the Save button and select the location you wish to save your .avi file.

You can set the video file stream in Hour, Minute and Second.



Hour

Minute

Second

5. Warranty

Product Name		Model Name	
Date Purchased		Serial Number	
Agency Purchased From		Price	

• This product is warranted as stated below.
• Please contact any agency for repairs.
(If no agency is available, please call our service center)
• Refund matters and Contents reports can be resolved within 7 days and the damage compensation can be resolved within 14 days.

■ Limited Warranty

• We guarantee that this product is free from any defects for one year from the date of purchase, provided that the product was set-up properly by following all the instructions contained in this manual.
• We do not guarantee the absence of failure in the design of this product and the O/S.
• This limited warranty limits our responsibility to (1) repairs, (2) replacement, and (3) refunds as mentioned below. Our company will not take any other responsibility beyond these three.
• The contents in this limited warranty includes responsibility of suitable sales and suitable aim.

■ Free Service

• You can get free service within one year of your purchase if the product fails to work.
• The period of possessing the parts is for 5 years.

Defects		Contens of Warranty	
		Within period of Warranty	After Warranty
Within period of Warranty		Exchange or refund	
When trouble occus within 10 days of purchase		Exchange	
Repair	When same failure occurs more than 3 times	Free exchange of service	Charged service
	When same failure occurs more than 4 times	Exchange or refund	Charged service
Beyond Repair	When it can not be repaired though there is the part	Exchange or refund	Refund without 30% of the original price

■ Charged Service

(1) When it is not a defect.

If you ask for service when it is not a defect, we have to charge you so please read this manual carefully.

• The system freezes because of O/S failure From the second time you will be charged.	The first time is free.

- Without removing the cover explain the measures that will be taken
- Connecting cables and Requesting for Network Service
- Reinstalling because of a previous bad installation
- Cleaning inside the product
- When the product has not been positioned firmly
- Request for a user customized install version
- Reinstallation because of bad installation by the user

Will be charged from the first time

(2) Defects caused by the user

-Defects caused by carelessness or attempt to repair and remodel
-Defects caused by attempt to repair
-Defects caused by using wrong voltage
-Defects caused by dropping and damage
-Defects caused by using unsupported devices

(3) Other occasions

- Defects caused by nature (fire, salt water, flood, etc.)
- When the wasting part is consumed

■ Safety Precautions

This product needs to be installed by a qualified technician and must be compatible with all area codes.

■ Warning

Risk of Electric shock. Do not open.

Warning: To reduce the risk of electric shock, do not remove cover. No user serviceable part inside. Refer servicing to qualified service personnel.